

A NEW SPECIES OF VERNONIA

FROM ECUADOR

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The alternate-leaved condition is sufficiently characteristic of the tribe Vernonieae to be one of the most useful means for distinction from some other groups such as the Liabeae. Opposite leaves do occur in the Vernonieae, however, especially among some members of the genus Vernonia sect. Critoniopsis. Such plants may not always be immediately recognized as members of the tribe and the new species described below was encountered in a loan of material sent for a study of the Eupatorieae of Ecuador by R.M.King.

Cuatrecasas (1956) has provided a key to the Andean species of Critoniopsis, but because of the combination of opposite leaves and glabrous outer surfaces of the involucre bracts the new species does not fit into the key. Cuatrecasas does give two species, V. crassilanata Cuatr. and V. trichotoma Gleason, having opposite leaves with the character being unreliable in the former species. Also in the Andes is V. chimboracensis Hieron. with opposite leaves and V. pichinchensis Cuatr. with the leaves tending to be opposite or subopposite. Of the above species two are obviously not closely related to the new Ecuadorian specimen; V. crassilanata has a totally different habit with numerous small oblong-elliptical leaves and longer pubescence, and V. pichinchensis has much smoother leaves and only 4 flowers per head. For V. chimboracensis only the description and type photograph have been seen but the plants apparently have smoother upper leaf surfaces, more reflexed leaf margins, heads with 11-12 flowers, an involucre with ca. 20 bracts up to 8 mm long, corollas ca. 6 mm long with tubes 2 mm long, 40-50 inner pappus setae about 5 mm long, 20-30 outer setae scarcely 2 mm long, and immature achenes ca. 3 mm long. The smoother leaves and different sized of involucre bracts and flowers seem particularly notable. The remaining species, V. trichotoma of Colombia, differs from the new species by the more acute leaves, the larger heads, the more pubescent involucre, and the numerous hairs on the outer surface of the corolla lobes. The latter species does have the same upper leaf surface seen in the new species, however, and it would seem to be the closest relative.

The close relationship between the new species and V. trichotoma would suggest some stability of the opposite-leaved condition in both species, but it has seemed wise to compare the Ecuadorian plant with some alternate-leaves members of the section Critoniopsis. Most of the latter prove to differ in having heads with only 1-6 flowers. Still, there is one species with more flowers to which the new species might key in the Cuatrecasas treatment, V. huairacajana Hieron. Description and photographs of the latter indicate a more bullate upper leaf surface, a more pyramidal inflorescence, and longer inner involucre bracts among other character differences.

At least one other opposite-leaved species of Vernonia sect. Critoniopsis is found in South America, V. stellata (Spreng.) Blake of Brasil. The latter is notable for the longer unbranched stalked hairs on the stems, leaves, and involucre bracts.

Vernonia sparrei H. Robinson, sp. nov.

Plantae arborescentes? laxae ramosae. Caules subteretes leniter sexangulares dense fulvo-puberuli, pilis breviter T-formibus inflatis plerumque 100-150 $\mu$  longis et 30-40 $\mu$  latis, internodiis 8-20 mm longis. Folia opposita, petiolis 5-15 mm longis dense puberulis non alatis; laminae oblongo-ellipticae 3-7 cm longae et 1.3-3.7 cm latae base late cuneatae margine integrae vel subtiliter sinuosae apice rotundatae et minute emarginatae vel apiculatae supra plerumque glabrescentes in nervis primariis persistentiter breviter puberulae, pilis 200-700 $\mu$  longis, nervulis distincte intricate prominulis; subtus fulvo-tomentellae et glanduliferae, pilis T-formibus vel tricornutis, nervis pinnatis, nervis et nervulis valde elevato-reticulatis. Inflorescentiae terminales dense subcymosae vel corymbosae, pedicellis 2-7 mm longis valde sulcatis dense fulvo-puberulis vel tomentellis, pilis 2-3-ramosis 200-300 $\mu$  longis. Capitula ca. 9 mm alta et 5 mm lata. Squamae involucri ca. 30 ca. 5-seriatae valde inaequales 0.5-5.5 mm longae plerumque 2 mm latae late ovatae vel oblongae apice perobtusae indistincte maculatae margine subscariosae interdum breviter incisae extus plerumque glabris superne sparse puberulae. Flores ca. 9 hermaphroditae. Corollae pallidae, tubis et faucis combinatis 3.5-4.0 mm longis plerumque 0.4-0.5 mm latis, tubis plerumque glabris, faucis indistinctis extus glanduliferis, lobis 2.0-2.3 mm longis et 0.6 mm latis lineari-oblongis extus persparse breviter setiferis apice pauce glanduliferis; thecae antherarum 2 mm longae inferne obtusae in parte

dentatae; appendices ovatae ca. 0.4 mm longae et 0.3 mm latae; styli in 0.1 mm basilaribus valde demarcati, cellulis distinctis subquadratis 10-20 $\mu$  diam. Achaenia 1.5 mm longis 0.7-0.8 mm latis in sulcis et basis glandulifera superne paucè breviter spiculifera; carpodia distincta ca. 0.2 mm alta et 0.4 mm lata, cellulis quadratis ca. 15-seriatis ca. 12 $\mu$  diam, parietibus incrassatis; setae pappi longiores ca. 40 plerumque 5 mm longae leniter complanatae apice distincte incrassatae, cellulis lateralibus exterioribus et apicalibus breviter acutis; setae in serieibus exterioribus indistinctae plerumque 0.5-1.5 mm longae. Grana pollinis 35-40 $\mu$  diam. leniter lophorata, cristis valde spiniferis.

TYPE: ECUADOR: Loja: Nudo de Cajanuma, ca. 6 km S Loja, shrub forest,  $\pm$  2400 m. 14/5 1967. B.Sparre 16056 (holotype S).

#### Literature Cited

- Cuatrecasas, J. 1956. Neue Vernonia-Arten und Synopsis der andinen Arten der sektion Critoniopsis. Bot. Jahrb. 77 (1): 52-84.



*Vernonia sparrei* H. Robinson, Holotype, Stockholm.  
 Photo by Victor E. Krantz, Staff Photographer, National  
 Museum of Natural History.